

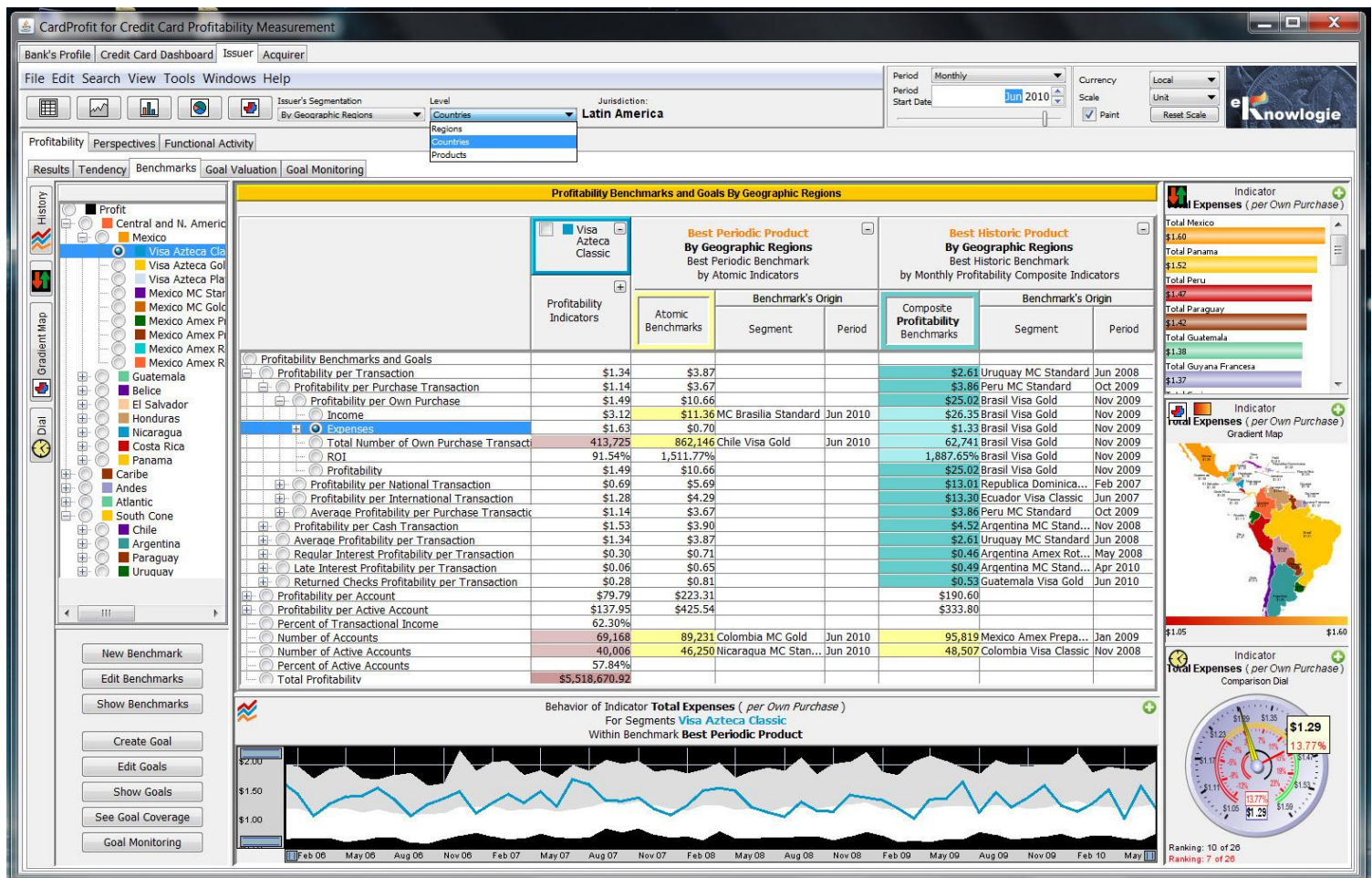


**CardProfit** is an analytics and recommendation application designed to increase credit card profitability and opportunity discovery for Issuer and Acquirer portfolios.

CardProfit is an analytics, business intelligence and strategic recommendation application for the integral administration of payments portfolios. It is used to increase profitability and opportunity discovery in Issuer portfolios in multi-dimensional cross-segmented markets, and to derive unit indicators and profitability benchmarks in order to support profitability and performance goal setting, valuation and monitoring. It is also used to promote portfolio product development and performance and facilitate studies of tendencies and life cycle issues. There is no similar or remotely comparable technology in the market today, because analytics without profitability extraction and optimization will not address the customers' bottom line.

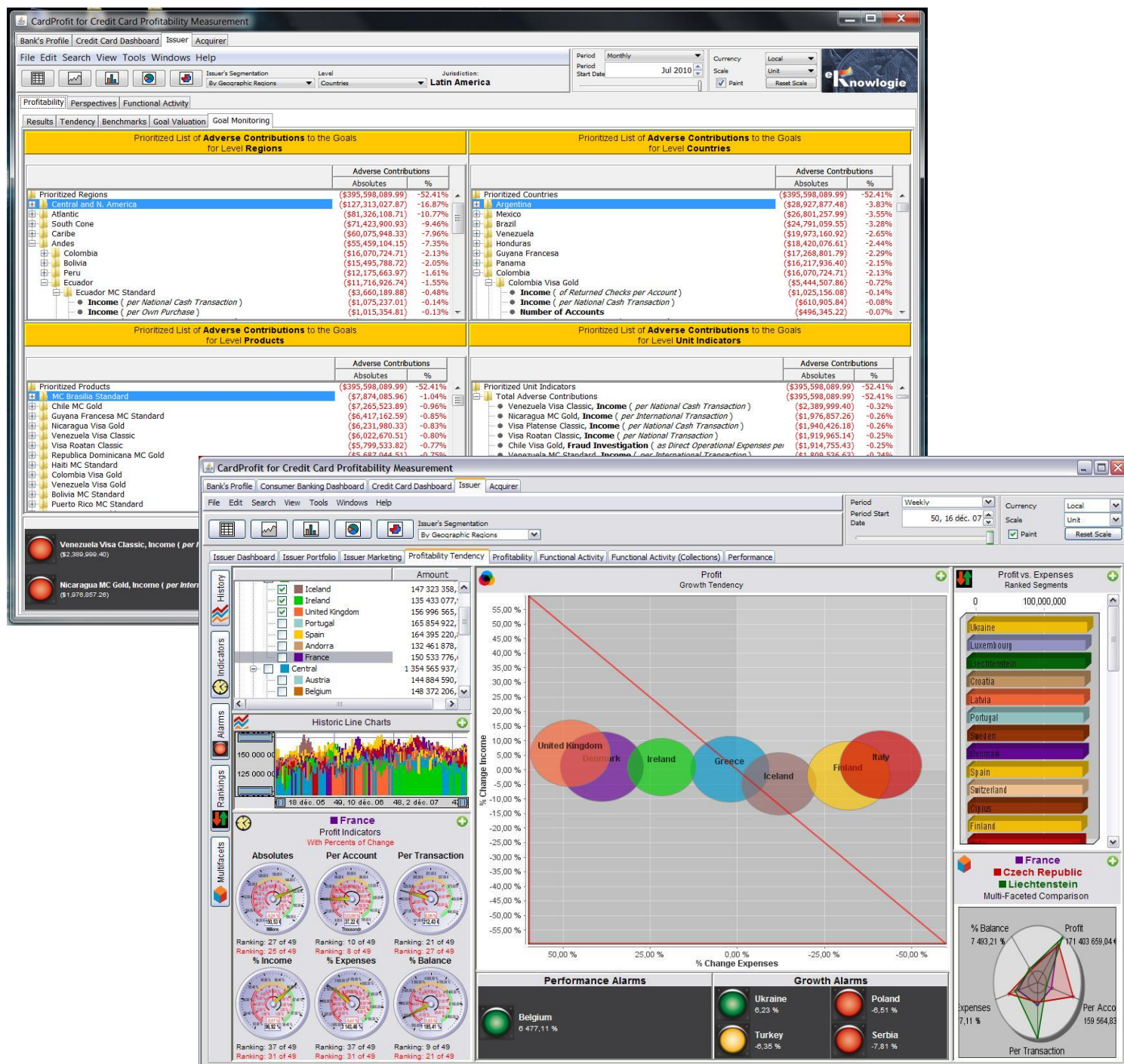
With CardProfit, bank-specific market segmentations can be created. For example, the Issuer business can be segmented by product, brand, product type, geographical regions, cardholder activity, credit limit usage, consumption volume, etc. CardProfit proposes a paradigm shift to a competitive emphasis where segmentations can be profiled in terms of unit indicators so that their performance can be isolated, compared and new opportunities identified. In particular, cross or intersected segmentations are essential to the understanding of the roles played by intersecting, independent market factors in opportunity discovery. For Issuer this leads to the discovery of opportunities and the realignment, redistribution and redesign of the product portfolio and cardholder populations based on transactional frequencies, balance and credit limit usage, etc., all resulting in increases in product performance and profitability. The CardProfit profitability methodology has been applied extensively and has resulted in profitability increases between 25% and 50%.

The example below shows profitability unit indicators for a *Visa Azteca Classic* product. This panel shows two of the benchmarks in a bank's catalog, which places *Visa Azteca Classic* in a frame of reference. Any of the indicators shown in the main table rows can be compared against segments in the hierarchy level selected in the tool bar. For banks without an international or regional context, other segment hierarchies might be used. Notice that the values shown in these examples are not realistic because the data has been generated randomly.



Goals can be established for any unit indicator and volume multiplier. These goals are called cascading goals because they can be applied to segment groups in a hierarchy and unless overridden, they will apply to all segments in that hierarchy group. So for example, certain goals can be applied to all classic cards in the country of South Korea except for different goals that apply only to Visa Classic Advantage in the region of Ulsan. Goals can be specified manually or be selected from benchmarks in the bank's benchmark catalog. Goal valuations can be ranked for every level in a hierarchy, so that we can identify the best or worst performers at every level, as shown below.

The following example shows goal monitoring for adverse contributions at all levels in the given hierarchy. These tables are prioritized from high to low adversity and illustrate the need to produce such tables for each level in the hierarchy. We observe below that the most adverse indicator, *Income per National Cash Transaction for Venezuela Visa Classic*, does not belong to the most adverse product, *MC Brasilia Standard*, and that product does not belong to the most adverse country, *Argentina*, which in turn does not belong to the most adverse region, *Central and North America*. This demonstrates that analysis at each level in the segment hierarchy encourages the use of different corrective strategies for the management teams at each level, while providing the bank's global management with a complete X-ray of the entire business.



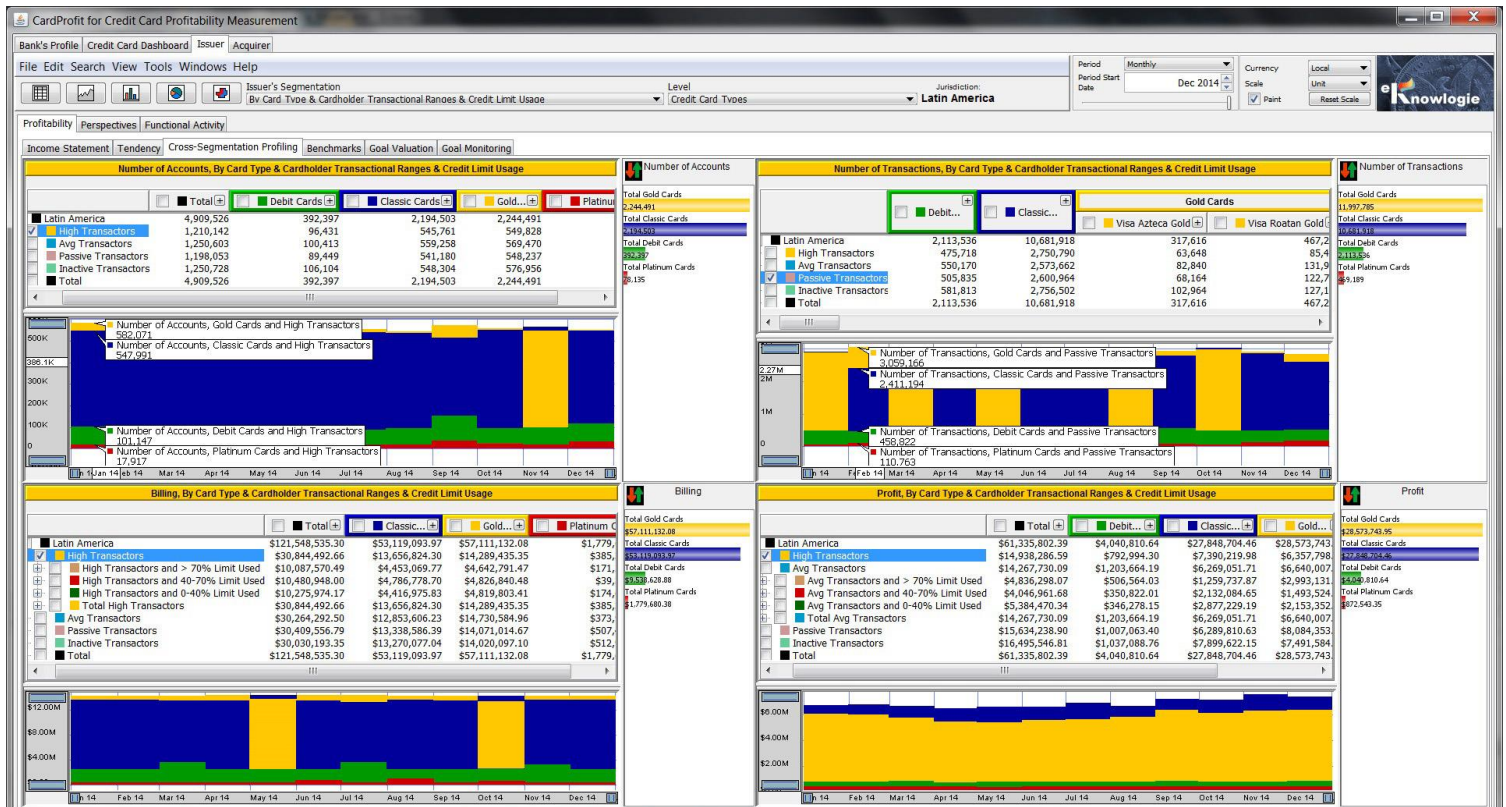
The example above shows an Issuer profitability tendency dashboard where the profitability tendencies can be analyzed in detail. Bubble charts show income and expenses movement separately so that the effect of one on the other can be visualized. Profit can also be measured by unit indicators or in relation to billing, expenses and balance.



## Multi-Dimensional Cross-Segmentations

**Intersecting or Crossing Credit Cards by Type with Cardholders by Transactional Frequency.** Product types (e.g. classic, gold, platinum) can be profiled by the expected percentage of cardholders in different transactional volume ranges (e.g. high transactors are cardholders who use the given card for most of their transactions and they contribute the majority of the transactional volume for that given product). The panel below shows the intersection or crossing of three segmentations, by product type, by cardholder transactional ranges, and by credit limit usage. Then we can readily identify how effective these products are in maximizing transactional volume according to their intended markets, and what cardholder population redistributions are necessary in order to increase these volumes towards the expected profiles. Furthermore, other market segmentations such as cardholders by balance and credit limit utilization can be used to make these redistribution recommendations by identifying opportunities to retarget these cardholder populations.

Because of the hierarchical nature of these tables, card type columns such as Classic and Gold can be opened up so that specific products can be analyzed. Similarly, ranking bars can be shown for any level in the intersection, e.g. by card types, by card types per cardholder transactional type, or by product per cardholder transactional type. This hierarchical level management is conducive to the presentation of detailed insights which illustrate the comparative essence of these product populations and leads to informed recommendations and decision making. Again, figures in the example below are random and do not reflect the realistic expectations of these segment intersections.



CardProfit is the only analytical and recommendation technology in the world market today for small and large banks alike, designed to increase profitability by discovering hidden opportunities through the realignment, repositioning, redistribution and expansion of the product portfolio and cardholder populations, and by unraveling incongruent expenditures to maximize product efficiency. The CardProfit architecture is highly scalable and is designed to run in the cloud under elastic servers with massive storage and processing capacity.